

REMARKS

Applicant's undersigned representative is in receipt of an Office Action mailed September 9, 2003, to the applicant. Applicant reminds the Office that a Power of Attorney and Change of Correspondence Address was filed on August 8, 2003, to which the Final Rejection is responsive. The undersigned respectfully requests that the Office address all future communications in this application to the undersigned attorney of record.

Reconsideration of the rejection of claim 26 under 35 U.S.C. 112, 1st paragraph, is respectfully requested in view of the comments.

The Office Action has rejected claim 26 as containing subject matter which is not described in the specification . . . at the time the application was filed.

However, applicants remind the Office that, as filed, the present specification incorporated by reference, *inter alia*, applicant's provisional application serial number 60/013,452. Applicants attach a copy of Serial No. 60/013,452 and respectfully direct the examiner's attention to the 2nd full paragraph on page 3 of that application, which contained the statement "The sodium silicate will separate the wood fibers from one another" Such subject matter clearly supports claim 26 and was part of the application as originally filed. However, in order to avoid any question as to the antecedent basis for claim 26, the specification has been amended to recite verbatim that part of the disclosure from Serial No. 60/013,452. Withdrawal of the rejection is respectfully requested.

Claim 27 stands rejected under 35 U.S.C. 112, 2nd paragraph, allegedly as being indefinite. The examiner has suggested that the limitation of claim 27 in question refers to any wood impregnation method known as conventional in the prior art and has examined the application with this interpretation.

Applicants agree to the Examiner's interpretation and, thus, claim 27 is definite under 35 U.S.C. 112, 2nd paragraph. Accordingly, withdrawal of the rejection is respectfully requested.

Reconsideration of the rejection of claims 25-27 under 35 U.S.C. 102(b) as allegedly anticipated by Lilla is respectfully requested. The Examiner is of the opinion that Lilla teaches "to fuse the silicate to form glass in the voids of the wood", citing column 2, lines 24-52, column 3, lines 60-63 and claims 1-5. However, Lilla contains no such teachings as to the formation of glass. In effect, Lilla, at column 2, only suggests the use of applying heat to "drive" a repetition of sodium meta-silicate and calcium chloride into the wood to be impregnated. As clearly shown at column 3, lines 14-18, the result of such repetition does not result in the formation of glass but, rather, a precipitate of calcium silicate (CaSiO_3) and ordinary table salt (sodium chloride - NaCl). There is no teaching whatsoever in claims 1-5 or the specification of Lilla as a whole for the formation of glass from a sodium silicate solution. Accordingly, Lilla cannot possibly anticipate the invention of claim 25. Moreover, as each of claims 26-27 depend from claim 25 and, by definition, incorporate all the limitations of claim 25, these claims can also not be anticipated by Lilla. Withdrawal of the rejection is, therefore, respectfully requested.

Reconsideration of the previous rejection of claims 25-27 under 35 U.S.C. 102(b) as allegedly anticipated by Du Fresne et al is respectfully requested in view of the following comments.

Newly cited Du Fresne et al is alleged to impart fire retardant properties to wood by impregnating the wood with a sodium silicate solution and then treating the silicate to form silica (glass) in the voids of the wood, citing column 1, lines 22-58 and claim 11. However, as set forth at column 1, lines 22-58, it is clear that patentees believe that only treatment of the impregnated wood product with carbon dioxide can form a polymer of silicon dioxide (glass) of sufficient size and length

and it cannot be easily washed from the interstices of the wood. Patentees continue on at column 2, lines 63-65, and teach that “mere exposure to ordinary air is insufficient because the percentage of CO₂ is too small.”

By the foregoing amendment, independent claim 25 has been amended to make it clear that the hardening of the sodium silicate solution into glass occurs in the presence of an atmosphere consisting essentially of air, with support being found in the original application, for example, under the heading “Summary of the Invention,” and, also, fully supported by applicant’s provisional application 60/013,452 (previously referenced above) under the heading “Overview” on page 3 of the application as filed. Accordingly, the foregoing amendment finds clear support in the original disclosure and does not constitute new matter. Moreover, the foregoing amendment could not have been earlier presented insofar as Du Fresne et al was newly cited in response to the applicant’s amendment of August 8, 2003. Thus, the specification of Du Fresne et al, and especially claim 11 thereof, does not anticipate the claimed invention. Moreover, as each of claims 26 and 27 are dependent on claim 25, thus incorporating the limitations thereof, these claims are also not anticipated. Accordingly, withdrawal of the rejection is respectfully requested.

Lastly, claims 25-27 stand rejected under 35 U.S.C. 102(b) as being anticipated by Clayton. Newly cited Clayton teaches impregnating wood with a sodium silicate solution and then, according to the Examiner, allegedly hardens the silicate to a glass. However, Clayton contains no such teaching of forming a glass from the sodium silicate. Rather, Example 3, teaches that small wooden panels, which could not be plated directly, were treated with and impregnated by a solution of sodium silicate so that the surface of the wood presented a smooth, glassy appearance. There is no teaching of the formation of glass, but merely that a glassy appearance is achieved. Applicant respectfully

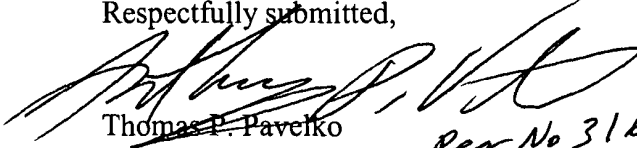
submits that the absence of a specific recitation of forming glass (rather than merely an analogy to the appearance of glass, i.e., a glassy surface) negates express anticipation of the claimed invention. As the Office Action admits, Clayton does not teach that fire retardance is imparted to the wood and applicants dispute that Clayton teaches the claimed process and material. Clayton provides no teaching of any steps undertaken after the sodium silicate was applied to the surface of the small wooden panels. It is not known if Clayton, like Du Fresne et al, treated the wood with carbon dioxide or used some other method of treatment.

In summary, the teachings of Clayton are so deficient in failing to describe either the formation of glass, or the specific steps of treatment, if any, applied by patentee, such that the reference fails to be anticipatory under both express and inherency theories of anticipation. Moreover, since Clayton fails to teach that his goal is fire retardance of the wood, applicants respectfully submit that it cannot be known as to whether Clayton includes a step of separating the wood fibers in the wood product from one another as in dependent claim 26. Although the examiner alleges that the teaching of Clayton reads on the requirements of claim 26, he provides no cogent reasoning for this assumption. This appears to be contrary to Clayton's intent of providing a surface coating on the wood such that the wood surface can be plated. Clayton does not provide sufficient teaching as to how long the impregnation occurs and, thus, there is no basis to conclude that such impregnation separates the wood fibers and the wood product from one another. This is not a mere observation of another benefit of an old process but, rather, the absence of specifically claimed limitations of a process which are nowhere expressly or inherently found in the cited prior art. For the foregoing reasons, withdrawal of the rejection of claims 25-27 over Clayton is respectfully requested.

Applicants appreciate the allowance of claims 22-23 but, in view of the foregoing amendment, believes that claims 25-27 are also in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

TPP/mat
Attorney Docket No.: TPP 30420A


for Thomas P. Pavelko
Registration No. 31,689 *Reg No 31674*

Attachment:
Copy of U.S. Provisional Application 60/013,452

STEVENS, DAVIS, MILLER & MOSHER, L.L.P.
1615 L Street, N.W., Suite 850
Washington, D.C. 20036
Telephone: (202) 785-0100
Facsimile: (202) 408-5200 or (202) 408-5088

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